ABSTRACT OF THE DISCLOSURE

A highly efficient projection system is provided, including a light source, a color separator, a scrolling unit, a light valve, a projection lens unit, and a polarization conversion system. The color separator separates an incident beam according to color. The scrolling unit includes at least one lens cell and converts a rotation of the lens cell into a rectilinear motion of an area of the lens cell through which light passes so the incident beam is scrolled. The light valve processes a beam transmitted by the color separator and the scrolling unit, according to an image signal and forms a color picture. The projection lens unit magnifies the color picture formed by the light valve and projects the magnified color picture onto a screen. The polarization conversion system is installed between the color separator and the light valve and converts the incident beam into a beam with a single polarization.